



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/746,150

12/22/2000

Joel S. Dick

067647.0115

2346

7590

03/09/2004

Barton E. Showalter
Baker Botts L.L.P.
2001 Ross Avenue
Dallas, TX 75201-2980

EXAMINER

KADING, JOSHUA A

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 03/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/746,150

Applicant(s)

DICK ET AL.

Examiner

Joshua Kading

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☒ Claim(s) 1, 9, 10, 11, 20, 21, 25, 26, 27, 28, 33, 34, 36, and 37 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: Specification, page 18, line 18 makes reference to a U.S. Patent but the Patent number is missing.

5 Appropriate correction is required.

Claim Objections

Claims 1, 9, 10, 11, 20, 21, 25, 26, 27, 28, 33, 34, 36, and 37 objected to because of the following informalities:

10 Claim 1, lines 4 and 8; claim 10, lines 2 and 5; claim 11, lines 4 and 12; claim 21, lines 2 and 5; claim 26, lines 3, 6, and 12; claim 27, line 3; claim 28, lines 4 and 6; claim 33, lines 4, 6, and 12; claim 34, line 4; claim 36, lines 3, 7, and 12; and claim 37, line 3 state, "transmit/receive". This should be changed to --transmit and receive--.

15 Claim 9, lines 3 and 5; and claim 20, lines 3 and 5 state, "voice/data". This should be changed to --voice and data--.

Claim 11, line 9 states, "transmit receive". This should be changed to --transmit and receive--.

Claim 25, lines 3, 7, and 9 state, "compressor/decompressor". This should be changed to --compressor and decompressor--.

20 Appropriate correction is required.

Claim Rejections - 35 USC § 112

Art Unit: 2661

The following is a quotation of the first paragraph of 35 U.S.C. 112:

5 The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10 Claims 8 and 19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. "A memory key" is disclosed in claims 8 and 19. What is "a memory key"? Is it an input to a hash table or some other kind of memory module? Or is it a button (key) that is pushed on a device? It is unclear what "a memory key" is.

15
Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

20 (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

25 Claims 1-6, 10-17, 21-24, 26-32, and 36-38 are rejected under 35 U.S.C. 102(b) as being anticipated by White et al. (U.S. Patent 5,475,681).

Regarding claim 1, White discloses "a communication system, comprising:

a central processor operable to transmit data packets and control packets (figure 1, element 107; col. 4, lines 41-48);

a transmit [and] receive module operable to receive the data packets and the control packets and transmit the data packets and control packets to one of a plurality of
5 terminal units (figures 1 and 2, element 109 where it clearly receives and transmits packets, both data and control);

a communication bus coupling the central processor to the transmit [and] receive module for communication of the data packets and the control packets (figures 1 and 2, element 101); and

10 a plurality of terminal unit control modules coupled with the central processor, each terminal unit control module operable to control at least partially the operation of a respective one of the plurality of terminal units (figure 1, elements 113, 119, and 125)."

Regarding claim 11, White discloses "a communication system, comprising:

15 a central processor operable to transmit data packets and control packets (figure 1, element 107; col. 4, lines 41-48);

a transmit [and] receive module operable to receive the data packets and the control packets and transmit the data packets and control packets to one of a plurality of terminal units (figures 1 and 2, element 109 where it clearly receives and transmits
20 packets, both data and control);

a first communication bus coupling the central processor and the transmit [and] receive module for communication of the data packets (figure 2, element 201); and

a second communication bus coupling the central processor and the transmit
[and] receive module for communication of the control packets (figure 2, element 203)."

Regarding claim 12, White discloses "the communication system of Claim 11,
5 further comprising a plurality of terminal unit control modules coupled with the central
processor, each terminal unit control module operable to control the operation of a
corresponding one of the terminal units (figure 1, elements 113, 119, and 125)."

Regarding claims 2 and 13, White discloses the communication systems of
10 claims 1 and 11. White further discloses "a script module coupled with at least one of
the terminal unit control modules (figure 2, element 206); and wherein the script module
is operable to determine the content of the control packets (col. 4, lines 59-62)."

Regarding claims 3 and 14, White discloses the communication systems of
15 claims 2 and 13. White further discloses "the script module defines a plurality of states
available to at least one of the terminal units, and the control packets include control
information corresponding with at least one of the states (col. 4, lines 62-63 where
listening and driving the bus are different states)."

20 Regarding claims 4 and 15, White discloses the communication systems of
claims 2 and 13. White further discloses "the script module defines a plurality of
subroutines available to at least one of the terminal units, and the control packets

Art Unit: 2661

include control information corresponding with at least one of the subroutines (col. 4, lines 62-63 where listening and driving the bus are different subroutines)."

Regarding claims 5 and 16, White discloses the communication systems of
5 claims 1 and 11. White further discloses "a terminal unit behavior script module coupled with at least one of the terminal unit control modules (figure 2, element 206; col. 4, lines 59-62), the terminal unit behavior script module defining a plurality of subroutines available to at least one of the terminal units; and wherein the control packets include information corresponding with at least one of the subroutines (col. 4, lines 62-63 where
10 listening and driving the bus are different subroutines)."

Regarding claims 6 and 17, White discloses the communication systems of
Claims 1 and 11. White further discloses "a terminal unit subroutine library coupled with at least one of the terminal unit control modules (figures 1 and 4, element 111), the
15 terminal unit subroutine library defining a plurality of commands associated with subroutines available to at least one of the terminal units; and wherein the control packets include information corresponding with at least one of the commands (col. 7, lines 36-39 where element 509, the control buffer, stores control commands)."

20 Regarding claims 7 and 18, White discloses the communication systems of Claims 1 and 11. White further discloses "a terminal unit attribute repository coupled with the terminal unit control modules; and wherein the attribute repository includes

Art Unit: 2661

attributes associated with at least one of the terminal units (figures 1 and 4, element 111; col. 7, lines 36-39 where element 500 contains attributes associated with the terminal units such as virtual circuits, data, and addresses)."

5 Regarding claims 10 and 21, White discloses the communication systems of Claims 1 and 11. White further discloses "the transmit [and] receive module is further operable to transmit data packets and control packets and the central processor is further operable to receive data packets and control packets transmitted by the transmit [and] receive module (figure 1, elements 107 and 109 are connected and transmit and
10 received packets on elements 103 and 101)."

Regarding claim 22, White discloses "a terminal unit, comprising:

a printed circuit board (figure 1, element 109 where IC signifies a printed circuit board);

15 a processor coupled with the printed circuit board, the processor operable to receive control packets from one of a plurality of terminal unit control modules associated with a communication system (figure 1, element 107; col. 4, lines 41-48)."

20 Regarding claim 23, White discloses "the terminal unit of Claim 22, wherein the processor is further operable to receive data packets from the communication system (col. 4, lines 41-48 by the processor having access (input and output) to the system it is able to receive packets from the system)."

Regarding claim 24, White discloses "the terminal unit of Claim 22, further comprising a command interpreter coupled with the processor, the command interpreter operable to receive commands associated with the control packets, and to control
5 hardware components of the terminal unit (figure 2, element 206 which is part of element 109 which is coupled to the processor; col. 4, lines 59-63)."

Regarding claim 26, White discloses "a method, comprising:

transmitting first control packets from a first terminal unit control module to a
10 transmit [and] receive module (figure 1, element 109 is the transmit and receive module, elements 113, 119, and 125 are the terminal unit control modules; col. 4, lines 38-56 where the each connection has its own data packets as well as its own control packets (for example, the LAN can send a first control packet) thus allowing it to communicate with the switching device);

15 transmitting second control packets from a second terminal unit control module to the transmit [and] receive module (figure 1, element 109 is the transmit and receive module, elements 113, 119, and 125 are the terminal unit control modules; col. 4, lines 38-56 where the each connection has its own data packets as well as its own control packets (for example, the phone can send a second control packet) thus allowing it to
20 communicate with the switching device);

the first and second terminal unit control modules operable to control at least partially the operation of first and second terminal units, respectively (col. 4, lines 38-56); and

transmitting data packets from a processor to the transmit [and] receive module
5 (col. 4, lines 38-56)."

Regarding claim 27, White discloses "the method of Claim 26, further comprising transmitting at least a portion of the control packets from the transmit [and] receive module to the first terminal unit (col. 5, lines 2-8 where driving the bus allows the
10 packets to be sent to the terminal units)."

Regarding claim 28, White discloses "the method of Claim 26, wherein the first and second control packets are transmitted from the first and second terminal unit control modules to the transmit [and] receive module using a first communications bus
15 (figure 2, element 201), and the data packets are transferred from the processor to the transmit [and] receive module using a second communications bus (figure 2, element 203)."

Regarding claim 29, White discloses "the method of Claim 26, further comprising
20 transmitting information regarding the content of the first control packets from a script module to the first terminal unit control module (figure 2, element 206; col. 4, lines 59-62)."

Regarding claim 30, White discloses "the method of Claim 29, further comprising transmitting terminal unit subroutine identifiers from a terminal unit behavior script database to the script module (figure 2, elements 211 and 206 where 211 is the
5 database)."

Regarding claim 31, White discloses "the method of Claim 29, further comprising transmitting at least one subroutine from a terminal unit subroutine module to the script module (col. 4, lines 62-63 where driving the bus is a subroutine and it is transmitted
10 from the terminal unit to the script module)."

Regarding claim 32, White discloses "the method of Claim 26, further comprising: coupling a terminal unit attribute repository to the processor (figures 1 and 4, element 111); and storing information regarding attributes of the first terminal unit at the terminal
15 unit attribute repository (col. 7, lines 36-39 where element 500 contains attributes associated with the terminal units such as virtual circuits, data, and addresses)."

Regarding claim 36, White discloses "a system, comprising:
means for transmitting first control packets from a first terminal unit control
20 module to a transmit [and] receive module (figure 1, element 109 is the transmit and receive module, elements 113, 119, and 125 are the terminal unit control modules; col. 4, lines 38-56 where the each connection has its own data packets as well as its own

Art Unit: 2661

control packets (for example, the LAN can send a first control packet) thus allowing it to communicate with the switching device);

means for transmitting second control packets from a second terminal unit control module to the transmit [and] receive module (figure 1, element 109 is the

5 transmit and receive module, elements 113, 119, and 125 are the terminal unit control modules; col. 4, lines 38-56 where the each connection has its own data packets as well as its own control packets (for example, the phone can send a second control packet) thus allowing it to communicate with the switching device);

10 the first and second terminal unit control modules operable to control at least partially the operation of first and second terminal units, respectively (col. 4, lines 38-56); and

means for transmitting data packets from a processor to the transmit [and] receive module (col. 4, lines 38-56)."

15 Regarding claim 37, White discloses "the system of Claim 36, further comprising means for transmitting at least a portion of the control packets from the transmit [and] receive module to the first terminal unit (col. 5, lines 2-8 where driving the bus allows the packets to be sent to the terminal units)."

20 Regarding claim 38, White discloses "the system of Claim 36, further comprising means for transmitting information regarding the content of the first control packets from

a script module to the first terminal unit control module (figure 2, element 206; col. 4, lines 59-62)."

Claim Rejections - 35 USC § 103

5 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

10 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

 Claims 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al.

15

 Regarding claim 33, White discloses "...transmitting first control packets from a first terminal unit control module to a transmit [and] receive module (figure 1, element 109 is the transmit and receive module, elements 113, 119, and 125 are the terminal unit control modules; col. 4, lines 38-56 where the each connection has its own data packets as well as its own control packets (for example, the LAN can send a first control packet) thus allowing it to communicate with the switching device);

 transmitting second control packets from a second terminal unit control module to the transmit [and] receive module (figure 1, element 109 is the transmit and receive module, elements 113, 119, and 125 are the terminal unit control modules; col. 4, lines 38-56 where the each connection has its own data packets as well as its own control

25

Art Unit: 2661

packets (for example, the phone can send a second control packet) thus allowing it to communicate with the switching device);

the first and second terminal unit control modules operable to control at least partially the operation of first and second terminal units, respectively (col. 4, lines 38-

5 56); and

transmitting data packets from a processor to the transmit [and] receive module (col. 4, lines 38-56)."

White lacks "a computer readable medium encoded with a computer program operable to" perform the steps above. Although White does not explicitly disclose a computer program operable to perform the steps above, it would have been obvious to one with ordinary skill in the art at the time of invention to include the computer program with the steps above for the purpose of implementing the steps in a communication system. The motivation being that a computer program is the only way to efficiently and easily implement such steps in a communication system.

15

Regarding claim 34, White discloses "the computer readable medium of Claim 33" and "...to transmit at least a portion of the control packets from the transmit [and] receive module to the first terminal unit (col. 5, lines 2-8 where driving the bus allows the packets to be sent to the terminal units)." White lacks "a computer readable medium encoded with a computer program operable to" perform the step above. Although White does not explicitly disclose a computer program operable to perform the step above, it would have been obvious to one with ordinary skill in the art at the time of invention to

20

include the computer program with the step above for the purpose of implementing the step in a communication system. The motivation being that a computer program is the only way to efficiently and easily implement such a step in a communication system.

5 Regarding claim 35, White discloses "the computer readable medium of Claim 33" and "...to transmit information regarding the content of the first control packets from a script module to the first terminal unit control module (figure 2, element 206; col. 4, lines 59-62)." White lacks "a computer readable medium encoded with a computer program operable to" perform the step above. Although White does not explicitly
10 disclose a computer program operable to perform the step above, it would have been obvious to one with ordinary skill in the art at the time of invention to include the computer program with the step above for the purpose of implementing the step in a communication system. The motivation being that a computer program is the only way to efficiently and easily implement such a step in a communication system.

15

Claims 9, 20, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al. in view of Kruse et al. (U.S. Patent 5,463,616).

 Regarding claims 9 and 20, White discloses the communication systems of
20 claims 1 and 11. White lacks "a voice [and] data module coupled with the central processor; and wherein the voice [and] data module is operable to determine the content of the data packets." However, Kruse discloses "a voice [and] data module

coupled with the central processor; and wherein the voice [and] data module is operable to determine the content of the data packets (figure 10, element 240 acts as the processor and element 242 acts as the voice and data module as can be read in col. 11, lines 18-22 where the act of packaging the voice and non-voice, or data, packets in their respective packets shows that 242 is able to determine the content of the packets)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the voice and data module with the systems of claims 1 and 11 for the purpose of having concurrent voice and non-voice communications over a network. The motivation being that having both types of communication allows for greater access, via a communication network, to people all over the world (col. 1, lines 47-49).

Regarding claim 25, White discloses "the terminal unit of Claim 22." White lacks "a compressor [and] decompressor module coupled with the processor and operable to receive data packets from the processor and convert the data packets into voice packets; a codec coupled with the compressor [and] decompressor, the codec operable to receive voice packets from the compressor [and] decompressor for transmission to a speaker associated with the terminal unit." However, Kraus discloses "a compressor [and] decompressor module coupled with the processor and operable to receive data packets from the processor and convert the data packets into voice packets (figure 10, element 242 acts as the processor and element 240 acts as the compressor and decompressor by taking the voice data and compressing and decompressing it into the appropriate packets as can be read in col. 11, lines 12-16); a codec coupled with the

Art Unit: 2661

compressor [and] decompressor, the codec operable to receive voice packets from the compressor [and] decompressor for transmission to a speaker associated with the terminal unit (figure 10, element 238)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the compressor and decompressor and the codec with the terminal unit of claim 22 for the purpose of having concurrent voice and non-voice communications over a network. The motivation being that having both types of communication allows for greater access, via a communication network, to people all over the world (col. 1, lines 47-49).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (703) 305-0342. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 09/746,150

Art Unit: 2661

Page 17



JK
March 3, 2004

5

Joshua Kading
Examiner
Art Unit 2661



KENNETH VANDERPUYE
PRIMARY EXAMINER